VII.—*Descriptions of new Reptiles and Batrachians obtained by Mr. Alfred Everett in Celebes and Jampea.* By G. A. Boulenger, F.R.S.

Cylindrophis isolepis.

Diameter of eye two fifths its distance from the nostril; distance between the eyes equal to the length of the snout. Rostral a little deeper than broad, separating the nasals, in contact with the præfrontals; frontal a little larger than the supraocular, considerably larger than the parietals, as long as its distance from the end of the snout; six upper labials, third and fourth entering the eye. 22 scales round the body; no enlarged ventrals; subcaudals 5. Black, each scale with a fine whitish edge; belly with two alternating series of large white blotches; lower surface of tail orange.

Total length 430 millim.

A single specimen from Jampea Island.

Calamaria nuchalis.

Rostral broader than deep, its upper portion as long as its distance from the frontal; frontal once and two thirds as long as broad, thrice as broad as the supraocular, as long as the parietals; one præ- and one postocular; diameter of the eye greater than its distance from the mouth; five upper labials, third and fourth entering the eye; two pairs of chin-shields in contact with each other, the anterior in contact with the symphysial. Scales in 13 rows. Ventrals 135; anal entire; subcaudals 16. Tail ending in an obtuse point. Dark brown above, with small round black spots; head dark brown above, speckled with black; nape yellowish, with two large black blotches; a black lateral streak, running along the second row of scales; outer row of scales white; belly white, with a black dot at the outer end of each ventral; tail with three or four yellow blotches on each side; subcaudals white, with a black line between them in the posterior half of the tail.

Total length 180 millim.; tail 15.

S. Celebes; a single male specimen.

Calamaria curta.

Rostral small, nearly as deep as broad, its upper portion hardly half as long as its distance from the frontal; frontal

once and two thirds as long as broad, twice as broad as the supraocular, much shorter than the parietals; one præ- and one postocular; diameter of the eye greater than its distance from the mouth; five upper labials, third and fourth entering the eye; two pairs of chin-shields in contact with each other, the anterior in contact with the symphysial. Scales in 13 rows. Ventrals 154; anal entire; subcaudals 14. Tail ending in a point. Olive-brown above, each scale with a black basal spot; head uniform; two outer rows of scales white, black at the base; ventrals black at the base, white on the border; subcaudals white.

Total length 315 millim.; tail 15.

S. Celebes, 2000 feet; a single female specimen.

Calamaria gracilis.

Rostral a little broader than deep, its upper portion about half as long as its distance from the frontal; frontal once and a half as long as broad, twice as broad as the supraocular, much shorter than the parietals; one præ- and one postocular; diameter of the eye equal to its distance from the mouth; five upper labials, third and fourth entering the eye; two pairs of chin-shields in contact with each other, the anterior in contact with the symphysial. Scales in 13 rows. Ventrals 211–235; anal entire; subcaudals 10–13. Tail rounded at the end. Grey-brown above, with small black spots; outer row of scales white, black at the base; ventrals white, black on the outer edge, with a continuous or interrupted median series of small black spots.

Total length 320 millim.; tail 8.

S. Celebes, 2000 feet; one female specimen. Bonthain Peak, 6000 feet; two specimens, male and half-grown.

Lachesis fasciatus.

Snout slightly turned up, with strong canthus. Rostral broader than deep; nasal entire; upper head-scales small, imbricate, smooth on the snout and between the eyes, obtusely keeled on the occiput; supraocular large; internasals large, separated from each other by one scale; 6 scales in a transverse series between the supraoculars; two postoculars and a subocular, which is separated from the labials by one series of scales in front and two behind; 9 or 10 upper labials, first fused with the nasal, second forming the anterior border of the loreal pit, third largest; temporal scales obtusely keeled. Scales rather feebly keeled, in 21 rows. Ventrals 162; anal entire; subcaudals 60 pairs. Tail feebly prehensile. Grey-

brown above, with numerous dark olive cross-bands, most of which are broken up on the vertebral line, their moities alternating; head uniform dark olive; whitish beneath, closely speckled with dark brown.

Total length 455 millim.; tail 80.

Jampea Island; a single specimen.

Sphenophryne variabilis.

Tongue large, oval, entire. Snout short, rounded, with feebly marked canthus; interorbital space broader than the upper eyelid; tympanum feebly distinct, two thirds or three fourths the diameter of the eye. Tips of fingers dilated into very large disks; first finger shorter than second; toes short, free, the disks much smaller than those of the fingers; no subarticular or metatarsal tubercles. Skin smooth. Coloration very variable. Grey, brown, purple, pink, or crimson above, uniform or with darker marblings, or with a lighter yellow or pink lateral streak; a light vertebral line sometimes present; sides of head usually dark brown; a dark, light-edged ocellus may be present on the lumbar region; beneath uniform whitish, or greyish with yellow spots, or dark brown with yellow spots.

From snout to vent 28 millim.

Bonthain Peak, Celebes, 5000–6500 feet; numerous specimens were collected by the Drs. Sarasin and by Mr. A. Everett.

VIII.—*Animal Temperature as a part of the Problem of Evolution.* By M. Quinton*.

I.—The temperature which governs the chemical reactions of life depends upon two factors—(1) the temperature of the surrounding medium, (2) the calorific power proper to the animal. The temperature of the surrounding medium in this respect is of such importance that the isocrymal lines or the lines of greatest cold are confused with the lines indicating the distribution of species on the surface of the globe.

Fossil flora discloses the fact that the temperature of the globe has been always on the decline; in ancient epochs it was very high. We must therefore ask under what thermic conditions the chemical phenomena of life were carried on,

* From the 'Comptes Rendus,' tome cxxii. pp. 850–853 (1896).